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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

TORRES, JOSEPH D

ART UNIT PAPER NUMBER

2133

DATE MAILED: 04/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/027,053	Applicant(s) ROSE ET AL.	
	Examiner Joseph D. Torres	Art Unit 2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
4a) Of the above claim(s) 5-22 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-4 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 20 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>06/11/2002</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I (including claims 1-4) in the reply filed on 04/04/2005 is acknowledged. The traversal is on the ground(s) that "that it would not present a serious burden for the Examiner to examine Groups II and III (claims 5-12) together with the claims of Group I. This is not found persuasive because Groups II and III include technical features of "bit error rate" detection and generation and would require an additional search in class 714/704 (and additional 477 patents) and Group II requires an additional search of 714/724 (and additional 1129 patents). The Applicant is invited to view the extensive search that was performed for Group I, which is now part of the record (714/715,716,820,821 comprising 587 patents was searched). The requirement is still deemed proper and is therefore made FINAL. Claims 5-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 04/04/2005.

Drawings

The drawings are objected to because of handwriting and poor consistency in the drawing of Figure 4. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings.

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Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "adapted to" used in lines 3, 8 and 10 is indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1- are rejected under 35 U.S.C. 102(b) as being anticipated by Murata; Yazuru (US 5099480 A).

35 U.S.C. 102(b) rejection of claim 1.

Murata teaches a bit stream comparison unit that is adapted to compare a first bit value sequence of the received bit stream to a second bit value sequence associated with a transmitted bit stream to detect a sequence difference between the first and second bit value sequences (Error Detector 6 in Figure 1 of Murata is adapted to compare a first bit value sequence of a received bit stream received from Receiving Circuit 2 to a second bit value sequence from Pattern Generator 4, which is substantially the same as the transmitted bit pattern stream from Pattern Generator 4, to detect a sequence difference between the first and second bit value sequences; Note: the Abstract of Murata teaches that the first bit value sequence of a received bit stream received from Receiving Circuit 2 is generated by Pattern Generator 4); and a multi-source agreement compliant electrical connector (Sending and Receiving Circuits 1 and 2 in Figure 1 of Murata comprise a multi-source agreement compliant electrical connector since they are

connected to multiple T-lines 21 and R-lines 22), wherein the multi-source agreement compliant electrical connector is adapted to convey the transmitted and received bit streams and is in communication with the bit stream comparison unit (the multi-source agreement compliant electrical connector, Sending and Receiving Circuits 1 and 2 in Figure 1 of Murata, is adapted to convey the transmitted and received bit streams and is in communication with the bit stream comparison unit), and wherein the multi-source agreement compliant electrical connector is adapted to be directly mechanically and electrically coupled to a multi-source agreement compliant device (Note: the transmission channel in Murata is comprised of physical wire lines).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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4. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murata; Yazuru (US 5099480 A).

35 U.S.C. 103(a) rejection of claims 2 and 3.

Murata substantially teaches the claimed invention described in claim 1 (as rejected above).

However Murata does not explicitly teach the specific use of an IC or a printed circuit board.

The Examiner asserts that Murata teaches circuitry for implementing all the elements of claim 1 for ISDN, but does not specify how the circuit is arranged on a semiconductor or a printed circuit board typically found on an ISDN network device, but instead leaves such obvious features for the design phase of implementing the device taught in Murada to allow the designer flexibility to select from readily available circuitry to implement the design. Note: it is well known in the Art that use of circuit boards allow the designer flexibility to select from readily available circuitry whereas placing all the circuitry on a single semiconductor chip provides a speed-up.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Murata by including use of an IC or a printed circuit board. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that use of an IC or a printed circuit board would have provided

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flexibility to select from readily available circuitry whereas placing all the circuitry on a single semiconductor chip provides a speed-up.

5. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murata; Yazuru (US 5099480 A) in view of Debany, Jr.; Warren H. et al. (US 4580274 A, hereafter referred to as Debany).

35 U.S.C. 103(a) rejection of claim 4.

Murata substantially teaches the claimed invention described in claim 1 (as rejected above).

However Murata does not explicitly teach the specific use of an optical transceiver.

Debany, in an analogous art, teaches use of an optical transceiver (col. 1, lines 50-53 in Debany).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Murata with the teachings of Debany by including use of an optical transceiver. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that use of an optical transceiver would have provided the ability to do loopback testing in a fiber networked environment (Note: optical communication lines are commonly used in ISDN networking environments).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Torres whose telephone number is (571) 272-3829. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**JOSEPH TORRES
PRIMARY EXAMINER**

Joseph D. Torres, PhD
Primary Examiner
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